

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior version, and listings, of claims in the application:

Listing of Claims:

Claims 1-16 (canceled).

17. (New) A method for calibrating at least two sensors for sensing a variable characterizing a combustion process in an internal combustion engine of a motor vehicle having at least two cylinders, the method comprising:

determining at least one operating point of the internal combustion engine, wherein at the at least one operating point an equalization of the at least two cylinders by at least one fuel quantity equalization method is adapted to be performed;

performing, at the at least one operating point of the internal combustion engine, an equalization of the at least two cylinders by the at least one fuel quantity equalization method; and

mutually adjusting, after the equalization of the at least two cylinders, at least one sensor parameter of the at least two sensors.

18. (New) The method as recited in Claim 17, wherein the variable characterizes the combustion process in a respective cylinder, and wherein the variable represents a pressure.

19. (New) The method as recited in Claim 17, wherein the at least one sensor parameter includes at least one of an offset and a gain factor of a sensor characteristic curve.

20. (New) The method as recited in Claim 17, wherein for the adjustment of the at least one sensor parameter, operating points of the internal combustion engine are selected where small disturbing effects as a result of operation of the internal combustion engine are to be expected.

21. (New) The method as recited in Claim 18, further comprising:

calculating one of torques indicated in the at least two cylinders and mean pressures indicated in the at least two cylinders from the corresponding variables sensed from the at least two sensors; and

determining, from one of a difference between the torques and a difference between the mean pressures indicated in the at least two cylinders, one of an erroneous sensor parameter and an erroneous sensor characteristic curve.

22. (New) The method as recited in Claim 21, wherein the adjustment of the at least one sensor parameter is accomplished by one of equating the torques indicated in the at least two cylinders and equating the mean pressures indicated in the at least two cylinders.

23. (New) The method as recited in Claim 21, wherein the adjustment of the at least one sensor parameter is accomplished by adjusting at least one operating parameter of the internal combustion engine.

24. (New) The method as recited in Claim 22, wherein the adjustment of the at least one sensor parameter is performed at a single operating point of the internal combustion engine.

25. (New) The method as recited in Claim 24, further comprising:

performing a filtering operation for the adjustment of the at least one sensor parameter, wherein the filtering operation includes averaging over at least two operating cycles of the internal combustion engine.

26. (New) The method as recited in Claim 21, wherein the adjustment of the at least one sensor parameter is performed at at least two operating points of the internal combustion engine.

27. (New) The method as recited in Claim 26, wherein the adjustment of the at least one sensor parameter is performed at at least two load points, and wherein the internal combustion engine is at a constant rotation speed at each load point.

28. (New) The method as recited in Claim 21, wherein for each cylinder, the indicated torque is derived from the sum of an effective torque and a frictional torque, and the

indicated mean pressure is derived from the sum of an effective mean pressure and a frictional mean pressure, the frictional torques and the frictional mean pressures for the at least two cylinders being assumed to be constant for the calculation of the indicated torque and the indicated mean pressure, and wherein a respective gain factor for each sensor is derived from the slope of a corresponding sensor characteristic curve defined by a plurality of values of one of indicated torques and indicated mean pressures, and wherein an offset is derived from one of a difference between the frictional torques of the at least two cylinders and a difference between the frictional mean pressures of the at least two cylinders.

29. (New) The method as recited in Claim 28, further comprising:

determining a malfunction of at least one of the two sensors and the internal combustion engine, based on a discrepancy between the sensor characteristic curves.

30. (New) The method as recited in Claim 28, wherein for each cylinder, the indicated torque is calculated from a polynomial representing an effective torque and a frictional torque, and the indicated mean pressure is calculated from a polynomial representing an effective mean pressure and a frictional mean pressure, and wherein the respective gain factor is derived from a computational curve matching of the sensor characteristic curves.

31. (New) The method as recited in Claim 30, wherein one of a frictional torque that varies as a function of the load of the internal combustion engine and a frictional mean pressure that varies as a function of the load of the internal combustion engine is used in the calculation of one of the indicated torque and the indicated mean pressure.

32. (New) The method as recited in Claim 22, further comprising:

performing a plausibility check of the at least one sensor parameter.